



**Petition to Compel the U.S. EPA to
Promulgate a Rule Relating to
Animal Welfare Under the Toxic
Substances Control Act**

April 5, 2005

SUBMITTED TO

The U.S. Environmental Protection Agency

SUBMITTED BY

People for the Ethical Treatment of Animals
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SUPPORTED BY

Physicians Committee for Responsible Medicine
American Anti-Vivisection Society
Alternatives Research & Development Foundation
Doris Day Animal League
Earth Island Institute (Marine Mammal Project)
The Humane Society of the United States

April 5, 2005

Stephen L. Johnson, Administrator
U.S. Environmental Protection Agency
Ariel Rios Bldg. (1101A)
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Re: Petition for Rulemaking to Compel the EPA to Promulgate a Rule
Relating to Animal Welfare Under the Toxic Substances Control Act



PEOPLE FOR THE ETHICAL
TREATMENT OF ANIMALS

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Dear Mr. Johnson:

On behalf of the more than 800,000 members of People for the Ethical Treatment of Animals ("PETA") and a coalition of national animal, health, and environmental protection organizations with a combined membership of more than 10 million Americans, we hereby petition the U.S. Environmental Protection Agency ("EPA" or the "Agency") to initiate rulemaking.

I. STATUTORY AUTHORITY

We submit this petition for rulemaking under the citizens' petition provision of the Toxic Substances Control Act (TSCA), 15 *U.S.C.* §2620, and its corollary in the Administrative Procedure Act (APA), 5 *U.S.C.* §553(e).

Section 2620(a) of TSCA provides that "[a]ny person may petition the Administrator to initiate a proceeding for the issuance, amendment, or repeal of a rule under §2603 (chemical testing), §2605 (regulation of hazardous chemicals), or §2607 (reporting information) of this title or an order under §2604(e) or §2605(b)(2) of this title." Following submission of a petition for rulemaking, the Administrator has 90 days to either grant or deny the petition as set forth in §2620(b)(3).

EPA has, on several occasions, issued guidance¹⁻² to industry participants in its High Production Volume Chemical Challenge Program ("HPV Program") outlining steps that should be taken to prevent or minimize the conduct of new animal testing under the Program (hereinafter referred to as animal welfare "guidance" or "principles"). However, as detailed below, both industry participants and the Agency itself have consistently disregarded even these most basic and common sense measures, resulting in an inestimable amount of costly, irrelevant, and ultimately avoidable animal testing and animal suffering. We therefore submit this petition for rulemaking requesting that EPA promulgate a rule to render its animal welfare guidance

¹ Letter from OPPTS Assistant Administrator, Susan Wayland, to HPV Program Participants. Website <http://www.epa.gov/chemrtk/ceoltr2.htm>. October 14, 1999.

² Data Collection and Development on High Production Volume Chemicals, 65 Fed. Reg. 81,686 (December 26, 2000)

enforceable under not only the HPV Program, but as to any TSCA test rules and voluntary consent orders.

II. FACTUAL BACKGROUND

On October 9, 1998, EPA, the Environmental Defense Fund, and the Chemical Manufacturers Association³ announced the HPV Program—each highlighting the fact that it was developed as a joint, cooperative effort on the part of EPA, EDF, and CMA. (Exh. 1.) In conjunction with its formal announcement, EPA sent a letter to approximately 900 chemical companies inviting them to participate in the HPV Program by volunteering to provide data for designated toxicity endpoints on all HPV chemicals. (Exh. 2.)

The HPV Program, as announced on October 9, 1998, provided that screening data on HPV chemicals would be made publicly available—whether from existing sources or through *de novo* testing for certain health and environmental effects, consistent with the Organization for Economic Cooperation and Development (“OECD”) Screening Information Data Set (“SIDS”) protocol. (Exh. 2.) The HPV Program has led chemical companies to test chemicals using a subset of the SIDS battery of tests, which can include as many as eleven animal tests.

In October 1999, EPA came to an agreement with the American animal protection community and set forth in writing a number of sound, scientific principles to be followed both by the Agency and companies participating in the HPV Program. These principles were designed to promote maximum use of existing information and other means to avoid the conduct of new testing and testing that is not scientifically relevant, thereby reducing the number of animals killed in this program.

By letter dated October 14, 1999, EPA notified participating companies of a number of specific “animal welfare principles” to be applied to the HPV Program.¹ These consisted of the following:

1. In analyzing the adequacy of existing data, participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach. Participants may conclude that there is sufficient data, given the totality of what is known about a chemical, including human experience, and that certain endpoints need not be tested.
2. Participants shall maximize the use of existing and scientifically adequate data to minimize further testing.
3. Participants shall maximize the use of scientifically appropriate categories of related chemicals and structure activity relationships.
4. Consistent with the Screening Information Data Set (SIDS) program of the Organization for Economic Cooperation and Development (OECD), participants

³ The Environmental Defense Fund is now known as Environmental Defense. The Chemical Manufacturers Association is now known as the American Chemistry Council.

shall not conduct any terrestrial toxicity testing.

5. Participants are encouraged to use in vitro genetic toxicity testing to generate any needed genetic toxicity screening data, unless known chemical properties preclude its use.
6. Consistent with the OECD/SIDS program, participants generally should not develop any new dermal toxicity data.
7. Participants shall not develop sub-chronic or reproductive toxicity data for the HPV chemicals that are solely closed system intermediates, as defined by the OECD/SIDS guidelines.
8. In analyzing the adequacy of screening data for chemicals that are substances Generally Recognized as Safe (GRAS) for a particular use by the Food and Drug Administration (FDA), participants should consider all relevant and available information supporting the FDA's conclusions. Participants reviewing the adequacy of existing data for these chemicals should specifically consider whether the information available makes it unnecessary to proceed with further testing involving animals. As with all chemicals, before generating new information, participants should further consider whether any additional information obtained would be useful or relevant.
9. Companies shall allow 120 days between the posting of test plans and the implementation of any testing.

The EPA's October 14, 1999 letter closes with the following words:

EPA recognizes that the HPV Challenge is a voluntary program that includes substantial public review and involvement. The successful implementation of the changes described in this letter will depend on the good faith effort and cooperation of all parties. We appreciate the spirit of cooperation and commitment that has characterized this initiative to date. The changes to the HPV Challenge program outlined above present the opportunity to advance our shared goals of expanding the basic health data available to the public, while incorporating certain animal welfare concerns and scientific principles. ***It is the intention of the Agency that the HPV Challenge program, including the test rule(s), should proceed in a manner that is consistent with these principles and concerns*** (Emphasis supplied).

(Exh. 3.)

On December 26, 2000, EPA issued its first *Federal Register* Notice describing the purpose, background, and structure of the HPV Program, and explaining that the two "commitment" phases of the HPV Challenge were over. The result was commitments from 469 chemical companies to sponsor 2,155 HPV chemicals. The Agency reaffirmed the animal

welfare principles outlined above in this *Federal Register* notice. (Exh. 4.) The notice referenced the October 14, 1999, letter and specified that “participants shall conduct a thoughtful, qualitative analysis of existing data before testing” (p. 81691), and that “participants... may conclude that certain endpoints need not be tested if, given the totality of what is known about a chemical, including human experience, there is sufficient existing data...” (p. 81690). The Notice expanded on several items including the following:

(a) The Agency stressed the need for justification if any proposed genetic toxicity testing was not to be conducted *in vitro*. If chemical characteristics of the substance precluded *in vitro* testing, the test sponsors were asked “to submit to EPA the rationale for conducting one of these alternative [*in vivo*] tests as part of the test plan.” (p. 81695)

(b) The EPA endorsed the use of the combined repeated-dose/reproductive/developmental toxicity test (OCED 422), which uses approximately 675 animals per test, rather than conducting separate repeated-dose, reproductive tests, and developmental toxicity tests, which kill approximately 40, 1,300 and 1,300 animals, respectively. Again, the EPA cautioned that where the combined reproductive screening study is not proposed, “test sponsors are asked to submit to EPA the rationale for conducting these alternative [separate] tests as part of the test plan” (pp. 81695 and 81697).

(c) With respect to acute fish toxicity testing, EPA stated that “for certain HPV chemicals, acute toxicity studies are of limited value in assessing the substances’ aquatic toxicity... For the purposes of the HPV Challenge Program... EPA believes that for chemicals determined to have a log K_{ow} equal to or greater than 4.2, the following tests should be conducted: chronic toxicity to daphnia (*in place of the acute toxicity tests in fish and daphnia...*)” (p. 81695, emphasis supplied.) “A sponsor who believes that acute aquatic fish testing is appropriate for an HPV chemical with a high log K_{ow} should provide in its submitted test plan the rationale for conducting such testing.”

Since the commencement of the HPV Program over five years ago, hundreds of test plans have been submitted for EPA and public review.⁴ The petitioner and scientists from the Physicians Committee for Responsible Medicine (PCRM) have reviewed every test plan submitted. As set forth below, the HPV Program Sponsors (the “Sponsors”) and EPA have consistently, repeatedly, and deliberately disregarded every single principle enshrined in the animal welfare guidance. The evidence in support of that statement follows in the next section and in the Appendix.⁵

⁴ Robust Summaries and Test Plans. Website [http://www.epa.gov/chemrtk/ viewsrch.htm](http://www.epa.gov/chemrtk/viewsrch.htm) .

⁵ See also Nicholson et al. ATLA 32(Suppl.1), 336-341 (2004), attached to the Sandler Aff. at Exh A.

III. THE SPONSORS' AND AGENCY'S DISREGARD FOR THE ANIMAL WELFARE PRINCIPLES APPLICABLE TO THE HPV PROGRAM⁶

Listed below are examples of both Sponsors' failure to observe, and EPA's failure to abide by, the animal welfare guidance for the HPV Program. (For full details, see footnote 2; see also additional examples cited in the Appendix.)

In April 2000, the EPA posted the first HPV test plan. It was an American Petroleum Institute (API) test plan for "petroleum coke" that proposed reproductive and developmental toxicity testing even though existing studies demonstrated the low toxicity of petroleum coke and similar substances. Additionally, extensive data are available on both humans and animals on similar substances (e.g., coal coke and anthracite coal), and API included little characterization of the actual PAH content (the primary chemical driver of toxicity) of the category members. In supporting the testing, EPA—as well as the test plan Sponsor—violated the guidelines on the use of thoughtful toxicology, including maximizing the use of "existing and scientifically adequate data" and the use of "scientifically appropriate categories of related chemicals."

In May 2000, EPA posted the American Chemistry Council (ACC) test plan for the "crude butadiene C4 category," which proposed additional reproductive and developmental toxicity testing of 1,3 butadiene streams (these industrial streams contain a variety of chemical compounds, and have slightly differing compositions). EPA responded that these tests were appropriate, and that ACC may need to test additional streams, as it was only testing two. Yet animal test results on all health effects endpoints already existed for 1,3 butadiene, and there are extensive human data on the compounds (according to the International Agency for Research on Cancer, epidemiological data from rubber workers indicates that it is "probably carcinogenic to humans"), and it is a highly regulated compound. Furthermore, results of animal testing show that the metabolism of butadiene occurs via different pathways in different animals so that interspecies interpolation is even more problematic in this instance. Both the Sponsor and EPA chose to ignore the guidance that "Participants may conclude that there is sufficient data, given the totality of what is known about a chemical, including human experience, that certain endpoints need not be tested." Further, EPA ignored the literature on the different metabolic pathways of butadiene, stating that the mouse was the preferred species over the rat, as it is "more sensitive," despite the fact that the literature shows the rat metabolism is more likely to be similar to human metabolism.

In August 2000, API submitted a test plan for the "petroleum gas streams" that proposed acute, repeated-dose, *in vivo* genetic, reproductive, and developmental toxicity tests for ethane, propane, butane, isobutene, and sweetened LPG. Many of these tests were to be conducted at levels already shown to be non-toxic, with the upper limit of test conditions limited by the explosive levels of these gases. The Agency's response was to ask for more testing, including additional testing on methane, a substance produced by humans in the gastrointestinal tract. In addition, EPA asked for more testing of petroleum gas streams with inorganic constituents such as ammonia, carbon dioxide, and hydrogen sulfide—chemicals whose toxicity is very well

⁶ A complete description of the OECD test guidelines, including the SIDS tests, can be found at Website http://www.oecd.org/departement/0,2688,en_2649_34377_1_1_1_1_1.00.html.

defined as either highly toxic in the case of hydrogen sulfide, indirectly toxic as in the case of carbon dioxide, or an acute irritant in the case of ammonia.

In November 2000, ACC submitted a test plan for the “C5 noncyclics” category, proposing extensive animal testing. EPA supported the testing even though many of the constituent chemicals of these mixtures were already well characterized, an extensive body of human data existed on isoprene, the most toxic chemical in these mixtures, and a proposed fish test on isoprene gas would be irrelevant, as isoprene gas is insoluble in water and aquatic exposure is unlikely to occur. Further, EPA supported *in vivo* genotoxicity testing, even though numerous genetic toxicity tests (both *in vitro* and *in vivo*) had already been conducted.

In January 2001, the American Forest and Paper Association submitted a test plan for “spent pulping liquor,” which proposed conducting fish toxicity tests. The Association proposed conducting these tests with “neutralized” liquor, as the material is usually extremely basic (pH>12). EPA supported this test, despite the fact that it is completely irrelevant to any real-world exposure scenario, as any release of spent pulping liquor would be accompanied by high pH conditions, which would be the most toxic aquatic endpoint. When the Agency’s response to this particular test plan was brought to the attention of EPA officials during a face-to-face meeting with now-Acting Administrator Stephen Johnson on October 17, 2001, EPA official Richard Hefter stated that “EPA’s decision to support the fish test came down to a flip of the coin.”

In March 2001, the Industrial Health Foundation (IHF) submitted a test plan for “cyclic anhydrides,” which proposed separate repeated-dose and developmental toxicity tests in addition to acute fish toxicity testing, even though these substances are known to be highly corrosive, forming strong acids when they come into contact with moisture. EPA supported the tests, despite the fact that these compounds are blinding, corrosive, and known to be highly toxic. Both the Sponsor and EPA ignored thoughtful toxicology (reproductive and developmental endpoints are difficult to assess for highly corrosive chemicals and corrosive chemicals cause increased animal suffering) and the guidance recommending the use of the combined protocol instead of separate tests. To the best of our knowledge, EPA never responded to IHF’s later request for guidance on testing known corrosive substances.

In May 2001, the Pine Chemicals Association (PCA) submitted a test plan for “tall oil and related substances,” which proposed a complete SIDS battery of animal tests with the exception of mammalian acute and genetic toxicity, even though the major components of the category—including the representative member of the category proposed for testing—are “Generally Recognized as Safe” (GRAS) food additives. In response to EPA’s comments, PCA subsequently added a mammalian acute toxicity test to its testing battery. EPA agreed with the sponsor’s proposed testing and requested additional testing even though there was no thoughtful evaluation of the value of additional tests on fatty acids, and PCA had failed to coordinate with other industries to develop a comprehensive category of fatty acids and related substances. EPA requested additional testing to show that tall oil pitch is representative of category members even though the substance itself is non-toxic. And even though the insolubility of the fatty acids makes the testing of tall oil mixtures on fish especially inappropriate (all of the mixtures had a

log K_{ow} greater than 4.2), EPA agreed with the proposed fish toxicity testing in direct contradiction of its own guidance on this subject.

In July 2001, ACC submitted a test plan for the “low 1,3 butadiene category,” which proposed testing 1-butene under the International Council of Chemical Associations (ICCA) HPV program, and isobutylene and 2-butene under the OECD HPV Existing Chemicals program for reproductive/developmental and repeated-dose toxicity endpoints. EPA approved of this testing and requested a mammalian acute toxicity study in addition, despite all indications that this testing would have to be conducted at explosive levels and under irrelevant conditions and in contradiction to previous guidance in EPA comments on the crude butadiene test plan. The Agency did not encourage ACC to combine this category with the high 1,3 butadiene category in order to reduce testing, thus violating the guidance that the use of categories be maximized. Despite abundant existing information, a clear understanding of the toxicity mechanism of these compounds in humans, a common association of 1-butene with the highly regulated carcinogen 1,3-butadiene, documented difficulties in extrapolating the effects of these compounds from animals to humans, and previous animal testing on substances containing up to 20% of this compound, ACC and EPA insisted on conducting additional animal testing to demonstrate that a non-toxic substance was indeed non-toxic. The results of ACC’s additional animal testing of the well characterized compound 1-butene were recently posted on EPA’s website and the results were, as predicted, irrelevant to the regulation of butadiene and the protection of public health. No observed effects were reported at levels of 8,000 ppm of 1-butene in air for any of the endpoints, despite the study being conducted at concentrations half the lower explosive limit of 16,000 ppm. Both the Sponsor and EPA ignored the animal welfare guidelines in which participants may conclude that “given the totality of what is known about a chemical, including human experience, certain endpoints need not be tested” and that call for the use of “existing and scientifically adequate data to minimize further testing.”

In October 2001, PCA submitted a test plan for “rosins and rosin salts” which proposed acute fish and mammalian developmental toxicity testing. EPA ignored extensive experience with rosins and related substances, including existing animal test results and widespread human use (they are regulated by the FDA as food additives), and agreed with the testing proposals. Both the Sponsor and EPA failed to follow the directive that substances with a high log K_{ow} not be tested on fish. EPA instead discussed the difficulty of conducting such tests and offered guidance on doing so. Additionally, information was provided to PETA by a PCA member company that the studies had already been initiated or completed and that PCA had reached a negotiated agreement with EPA on which tests would be conducted prior to submitting its test plan(s) for public comments. Both the Sponsor and EPA violated the guidance that test plans should be posted for 120 days and public comments considered.

In September 2001, Akzo Nobel submitted a test plan for “trixylenyl phosphate.” The entire test plan consisted of a table stating that the compound would be tested; it provided no information on the tests to be used and no discussion of existing data or the Sponsors’ attempts to locate data. It was a classic case of thoughtless check-the-box toxicology. EPA’s response merely stated that “it would be informative if a discussion was provided describing how you arrived at the conclusions regarding the adequacy of data available for the various endpoints.” On a phone call to the Agency regarding this test plan, EPA official Rich Hefter informed PCRM, in clear violation of the animal welfare guidance, that companies did not need to submit

existing data if they were planning to simply conduct all the tests. This claim was later reiterated in correspondence from Bill Sanders, director of OPPT.

In October 2001, PCA submitted a test plan for “rosin adducts and adduct salts,” which proposed a full SIDS battery of tests. Despite the fact that these are naturally occurring substances found in pine trees, which could have been grouped with rosins and rosin salts on the basis of expected similar toxicological effects, as well as the fact that basic hydrolysis analysis had not yet been performed, EPA approved the testing. EPA approved acute fish toxicity testing even though the material to be tested lacked hydrolyzable functional groups which hinder the ability to conduct aquatic tests and indicates that the substance is unlikely to be bioavailable to aquatic life. The log K_{ow} for the substances in this category varied widely; however, instead of requesting that PCA better define the substances’ solubility and partition coefficients, EPA merely discussed the difficulties of conducting acute fish toxicity testing with insoluble materials and offered guidance on doing so. Both the Sponsor and EPA completely disregarded the guidance which asks that a rationale be provided for acute aquatic fish testing for chemicals with high log K_{ow} values.

In November 2001, IHF submitted a test plan for “cyclohexanol,” which called for mammalian acute and subchronic (90-day) toxicity testing. EPA’s posted comments stated that “there is no testing or inadequate testing for repeated dose toxicity and reproductive/developmental toxicity,” did not mention existing evidence of health effects brought forwarding the animal protection community’s comments, including a draft report issued by California EPA a month prior, entitled *Evidence on the Developmental and Reproductive Toxicity of Cyclohexanol*, and agreed that additional testing for the screening level HPV Program was necessary.

Cytec Industries and Ciba’s test plan for “2-hydroxy-4-n-octoxybenzophenone” was posted in November 2001. It proposed no further testing. EPA, however, requested that a reproductive/developmental toxicity test be conducted, even though the company had submitted data for a study that evaluated reproductive and developmental toxicity over four generations of animals at a high dose level that should have been adequate to meet HPV screening requirements. Even though this test was not considered GLP, the HPV Program does not require GLP, and the vast majority of published data are not GLP. EPA’s request ignored “existing and scientifically adequate data” and exemplified check-the-box testing rather than a thoughtful approach to toxicology.

ACC’s November 2001 test plan for the “propylene streams” category proposed additional testing for developmental toxicity and *in vivo* genetic toxicity for propylene. In its public comments, the animal protection community pointed out the fact that these compounds are well-characterized and have clearly documented toxicological mechanisms, the most important of which is the fact that these compounds are rapidly expelled from the body. Despite the abundant existing information on their toxicity and metabolism—including extensive animal testing—EPA did not raise any concerns about the irrelevance of further testing of these compounds. This well-known information was corroborated by the results of the redundant testing that was conducted on these compounds. Because EPA did not object to ACC’s use of the separate developmental toxicity testing and *in vivo* genetic toxicity testing, at least 1,380

animals were killed to again demonstrate that a non-toxic substance was, in fact, non-toxic. Both the Sponsor and EPA flagrantly violated the animal welfare guidelines.

In November 2001, Great Lakes Chemical Corporation (GLCC) submitted a test plan for “phosphoric acid tris (methylphenyl) ester (triclesyl phosphate),” which called for a developmental toxicity study. The test plan was extremely sloppy and lacked the necessary information on basic physiochemical properties. The animal protection community asked that EPA fulfill its role in proactively addressing the submission of such inadequate plans under the HPV Program. Nevertheless, EPA approved the testing. In violation of the guidance to minimize the number of animals used, EPA “strongly” recommended that an OECD 414 (1,300 animals) be conducted on this reproductive toxicant rather than (1) requesting that the combined reproductive/developmental toxicity test, which uses half the number of animals be used, and/or (2) recognizing that existing data show that this substance apparently interferes with reproduction. EPA also asked for fish toxicity testing and the sponsor complied with both demands. Despite repeated requests by the animal protection community spanning several years for an explanation of EPA’s demand that an OECD 414 be conducted, EPA has never provided a response.

GLCC’s test plan for “isopropylated triphenyl phosphate” was posted in December 2001. It consisted solely of a one-page chart and list of tests in IUCLID format, with no analysis or context, nor any attempt to group this substance into a larger category of phenyl-phosphate compounds. It proposed genetic, reproductive, and developmental toxicity testing, which EPA summarily approved with no mention of the complete inadequacy of the “test plan.”

In December 2001, ACC submitted a test plan for “hindered phenols,” which consisted of a category of eight chemicals, some already regulated by FDA. ACC located substantial existing data on the chemicals, as well as data from three supporting chemicals, and did not propose additional testing. EPA comments were posted seven months after the end of the comment period. EPA rejected the category and recommended that a reproductive/developmental toxicity test be conducted on one chemical, while stating that a separate developmental toxicity study was necessary on another. In violation of its own guidance, EPA recommended that an OECD 414, which uses twice the number of animals as the combined test protocol, be conducted. EPA also recommended that a fish toxicity test be conducted on one chemical, but failed to follow its own directive that substances with a high log K_{ow} should not be tested on fish without justification. ACC submitted a revised test plan in July 2003, but the Agency had taken over a year to post it (September 2004), and the testing was already underway, thus demonstrating a complete disregard for public comments.

In January 2002, ACC’s test plan was posted for “fatty nitrogen-derived cationics,” which did not call for any additional animal testing. In yet another example of check-the-box toxicology, EPA called for a reproductive/developmental toxicity test without apparently considering the results of two multigenerational reproduction studies that were referenced in the test plan, and which demonstrated no adverse reproductive effects. Further, the Sponsor provided developmental toxicity data for nine of the 13 chemicals in this category, none of which showed evidence of adverse developmental effects.

The Flavor and Fragrance HPV Consortia's test plan for "ionone derivatives" was posted in May 2002, and called for no further animal testing on these naturally occurring, non-toxic GRAS compounds for which substantial information was already available, and for which human exposure occurs mostly via consumption of fruits, vegetables, and nuts. EPA, however, insisted that a developmental toxicity test be conducted despite its guidance regarding GRAS chemicals, namely that "participants should consider all relevant and available information supporting the FDA's conclusions."

Cardolite Corporation's June 2002, test plan for "cashew nutshell liquid" called for acute toxicity testing, and repeated-dose/reproductive/developmental toxicity testing for this substance, a known irritant to which exposure is already carefully controlled and limited. EPA completely ignored an extensive database on similar alkylphenol compounds –which contain some of the same active functional groups, as previously presented in a Schnectady International test plan on alkylphenols – and agreed with the proposed testing. Moreover, EPA failed to mention that the proposed acute toxicity testing was unnecessary as the range finding study used to select doses for the repeated-dose/reproductive/developmental toxicity testing would provide high-dose toxicity data sufficient for screening-level purposes. EPA simply requested that an additional test, a 90-day fish toxicity study that is not part of the HPV program, also be conducted.

Merisol USA's July 2002, "ethylphenols category" test plan called for an acute oral mammalian toxicity test, and repeated-dose/reproductive/developmental toxicity testing, *in vivo* genetic toxicity testing, and fish toxicity testing. EPA agreed with the proposed testing, ignoring the fact that, although Merisol had information on five of the six chemicals in the category, the company stated inexplicably that "no existing studies will be relied upon for HPV evaluations." EPA also ignored additional data on this category supplied by the animal protection community in its comments, as well as Environmental Defense's recommendation that "cytotoxicity studies be used instead of acute toxicity tests in rodents. Inasmuch as these substances likely possess low acute toxicity and high-dose data will be obtained from the range-finding component of the repeated-dose study, conducting separate acute toxicity tests in rodents is an unnecessary use of animals." The Sponsor's proposal and EPA's endorsement of the full range of animal testing, absent a full evaluation of existing data on individual isomers, were a clear violation of the animal welfare guidance.

Merisol USA's July 2002, test plan for the "mixed xylenol category" again ignored existing data for each and every endpoint. There was no inter-company or inter-industry coordination on this test plan, even though such coordination would have reduced the proposed testing and would have been consistent with the animal welfare guidance. EPA ignored existing data referenced in the animal protection community's comments and approved the proposed testing for the entire range of mammalian and fish toxicity endpoints, including the *in vivo* genetic toxicity testing, although no justification had been provided and negative *in vitro* and *in vivo* genetic toxicity results already existed.

In August 2002, EPA posted API's test plan for the "waxes and related materials category." The test plan included dermal repeated-dose, reproductive, and developmental toxicity tests, and an *in vivo* genetic toxicity test (with possible additional testing). EPA accepted this test plan even though API had clearly failed to consider including these insoluble

wax compounds in a larger category along with the lubricating basestock oils, which are produced in the same processes. Moreover, existing data were available (including three 80-day carcinogenicity studies) that API ignored. Also ignored were the fundamental physical/chemical characteristics of the compounds and their primary toxicity driver. EPA failed to address the use of the *in vivo* genetic toxicity test in its response, even though API's statement regarding this test was clearly self-contradictory. EPA also approved the proposed dermal studies even though the Agency had specifically proscribed testing via the dermal route under the HPV Program.

In June 2002, a one-page chart was submitted as a test plan for "propanoic acid" by a company identified as "confidential" on EPA's website. The test plan proposed acute mammalian, repeated-dose, reproductive, and developmental toxicity testing, as well as fish toxicity testing. PETA ascertained that the company was PPG Industries, despite the fact that EPA refused to reveal its identity. In its extremely short response to PPG's revised test plan, the Agency merely agreed with all the proposed testing and, rather than requesting the elimination of the acute fish toxicity test due to the substance's high log K_{ow} (or a scientific rationale) – per the Agency's own guidance on the subject – EPA merely requested that a chronic *Daphnia* test be conducted in addition to the fish test. PPG's revised test plan was still largely inadequate and provided insufficient information, e.g., no chemical structure(s) or physicochemical data to allow for a reasonable public review. After providing detailed scientific arguments, the animal protection community concluded its comments with another plea to EPA: "PPG's revised test plan fails to provide basic information, the mammalian test plans are clearly premature, and the only firm conclusion that can be reached at this stage is that the fish test is inappropriate. We call on the EPA to take its review of test plans seriously, and to reject a plan that is clearly inadequate. We remind the EPA of its commitment to a careful analysis of test plans with an eye towards reducing the number of animals killed wherever possible." EPA posted its response to the PPG revised test plan *three days before* the animal protection community comments were posted and issued a terse one-sentence response: "EPA agrees with the test plan for these [health] endpoints."

In October 2002, Ameribrom, Inc. submitted a test plan for "2,2-bis(bromomethyl)- 1,3-propandiol (BBMP-diol)," which proposed fish toxicity testing as well as a second-species developmental toxicity study (which consumes approximately 900 rabbits in a test that is not part of the HPV Program). In a one-sentence response, EPA agreed with this proposal, even though the animal protection community had pointed out the fact that a multigenerational reproductive toxicity test had already been conducted, in which the animals were not affected in terms of survival and growth (though the number of live pups per litter was reduced), and necropsy of pups from this group showed no developmentally-related effects other than reduced birth weight. The Sponsor later concluded that a careful review of the breeding study provided sufficient data to satisfy the screening level assessment of the substance for reproductive and developmental hazards.

In December 2002, EPA posted a test plan for Westvaco's "2- cyclohexene-1-octanoic acid, 5 (or 6)-carboxy-4-hexyl (DIACID 1550)," which proposed a repeated-dose/reproductive/developmental toxicity test. The Sponsor had not attempted to use additional data from other similar chemical mixtures even though, several times in its proposed test plan,

the company mentioned similarities and made comparisons between categories, as well as stating that DIACID 1550 is unlikely to cause appreciable toxicities. Importantly, the Sponsor stated that “[t]his leads to the expectation that 2-cyclohexane-1-octanoic acid, 5 (or 6)-carboxy-4-hexyl also has a low subchronic toxicity and that further testing, which would require the use of vertebrate animals, is not justified. [However,] subchronic toxicity is a basic data requirement within the HPV Chemical Challenge Program, and the absence of data for this end-point...suggests that testing of Westvaco DIACID®1550 using OECD method 408 is required.” EPA issued a one-sentence agreement with this check-the-box testing proposal, instead of encouraging a “thoughtful, qualitative analysis rather than use a rote checklist approach,” per its guidance.

In January 2003, Dow Chemical’s test plan covering the “ADPODS (alkyl diphenyl oxide disulfonates)” category was posted. The test plan called for two repeated-dose/reproductive/developmental toxicity tests on two chemicals that were not part of the HPV Program. EPA agreed with the test plan even though the robust summaries contained no fewer than 11 chronic and subchronic studies that examined reproductive organs, as well as a developmental study. The test plan included the fact that the category members have consistent and known mammalian toxicity profiles, even observing that “in all instances, **there were no adverse effects in any of these [reproductive] organs.**” (Emphasis in original.) EPA had accepted this information in lieu of new reproductive testing in previous test plans but appears to have overlooked these data in this case. Further, the Sponsor stated in calls with PCRM that one of the tests was already completed and was initiated prior to the end of the public comment period.

In January 2003, EPA posted the Metal Carboxylates Coalition’s test plan for “metal carboxylates.” This complex test plan consisted of six subcategories for which a variety of fish and mammalian toxicity testing was proposed. The plan was poorly written and documented, but relied on the underlying commonality of the chemical structures as a unifying theme. EPA objected to the category and found that the unifying properties of the plan were not supported. Yet EPA did not have any objections specific to the numerous proposed tests, even where existing data would support hazard classification decisions in the absence of additional animal data. Of particular concern to the animal protection community was the fact that EPA posted its comments *prior* to the end of the public comment period, thus clearly ensuring that the scientific and animal welfare issues raised by the animal protection community were not taken into account or remotely considered.

In December 2002, FMC submitted a test plan for “methyl 3,3-dimethyl-4, pentenoate” with a proposal to conduct a reproductive/developmental toxicity test. The test plan consisted solely of a single sheet, with a list of the tests that were and were not proposed, absent any rationale or justification. The animal protection community asked EPA to require the preparation and resubmission of a complete test plan, and pointed out that FMC had submitted similarly incomplete HPV test plans on at least four occasions in the past, in violation of both the animal welfare guidance and the original HPV framework agreement to which all sponsors agreed to adhere. Rather than requesting an adequate submission, however, EPA merely agreed with the proposed testing.

General Electric (GE) submitted a test plan for the chemical “2,4,6-trimethylphenol (2,4,6-TMP)” in January 2003 that proposed a repeated-dose/reproductive/developmental toxicity test. However, PCRM located a category submission to EPA from Schnectady International, Inc, submitted in May 2001, covering numerous alkylphenol chemicals. GE could and should have used this test plan to avoid further testing since one of the chemicals covered by the Schenctady test plan was 2,3,6-TMP—an analogous compound. In its comments, PCRM provided a variable-by-variable comparison of the two chemicals across several endpoints, including physicochemical properties, solubility, and toxicity values. EPA ignored the animal protection community’s comments, including this obvious duplication, and agreed with the test plan largely as written.

In January 2003, GE submitted another test plan for “N-methylphthalimide,” proposing a repeated-dose/reproductive/developmental toxicity test. Both PCRM and Environmental Defense pointed out that available data obviated the need for further testing, including the existence of histopathology information on the reproductive organs from a repeat-dose study, along with developmental data from a study contained in the robust summaries. PCRM also located another developmental toxicity study that was not listed in the robust summaries. EPA concurred with GE’s test plan, only recommending a reproductive/developmental toxicity test, which uses the same number of animals. EPA provided no explanation for its statement that the developmental study listed in the robust summaries was inadequate.

Atofina’s test plan for “methane sulfonic acid” was posted in February 2003, and proposed to conduct an OECD Test Guideline 408 (subchronic oral toxicity). However, the entire test plan consisted of a one-page data matrix table. There was no discussion of the chemical, its uses, or existing data. The robust summaries were also of poor quality. Atofina failed to detail searches for data, the substance’s production (e.g., whether the chemical might be a closed system intermediate), or searches for similar chemicals to help inform the data matrix. Though repeated-dose and developmental tests had been conducted within the past seven years, no discussion was provided as to whether Atofina could have fulfilled the reproductive toxicity requirement using negative developmental data in combination with histopathology from the reproductive organs of animals used in the prior repeated-dose test. Environmental Defense also noted that the “literature contains over 4,000 peer-reviewed reports,” and concluded that further animal tests were unwarranted given the acidic and corrosive nature of the substance. Not only did EPA fail to take any of these comments or the poor quality of the test plan into account, but in fact called for a reproductive/developmental toxicity test. The Agency did so despite that fact that it had previously recommended no further testing for both benzenesulfonic acid and hydroxybenzenesulfonic acid, two substances which are similarly likely to hydrolyze into components of known toxicity and are extremely corrosive to tissues.

In December 2003, The Flavor and Fragrance HPV Consortium submitted a test plan for “3 and 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde.” EPA agreed with the Sponsor’s proposal to conduct a fish toxicity test even though the water solubility and the log K_{ow} for the chemical had not yet been determined. EPA also agreed with the proposed reproductive/developmental toxicity test, despite the fact that the effects of this chemical are well known: it is a chemotherapeutic agent at high doses (> 2000 mg/day), it is regulated by the

World Health Organization and FDA, and the existing data were clearly sufficient for a screening-level program.

In April 2003, EPA posted API's test plan for the "lubricating oil basestocks category," which proposed a repeated-dose, reproductive, and developmental toxicity test and a reproductive/developmental toxicity test. API's proposal failed to provide any chemical analyses or characterizations of these materials, including basic compositional information. It also ignored existing data on the toxicology and hazards of petroleum fractions, which constitute the toxic components of this category, and failed to group these substances with similar substances such as API's own waxes and related substances category. Rather than request a more thorough and thoughtful analysis, EPA requested that several additional tests be conducted.

In May 2003, ACC submitted a test plan for "2,5-furandione, 3-(docenyl)dihydro-, reaction products with propylene oxide," a lubricant additive, which proposed the full SIDS battery of testing except for mammalian acute toxicity. ACC proposed to assess genetic toxicity testing *in vivo*. ACC failed to take into account the fact that in the case of many lubricant additives, including the compounds in this category, the high molecular weight, low solubility, and the fact that they are diluted in a relatively non-toxic oil base in most exposure scenarios, limit the toxicity and bioavailability of these compounds and render a more detailed toxicity analysis essentially moot. The analysis of the toxicity of this category and similar compounds could have been quite easily conducted for the screening-level HPV Program without further animal testing, which merely serve to "check the box." Further, no attempt to categorize 2,5-fu with similar compounds appeared to have been made. The information provided about the chemistry of 2,5-fu was both limited and inconsistent. This lack of attention to the compound's chemistry strongly suggested that little attention had been given to the potential for categorization, which represented a violation of the animal welfare principle that participants maximize the use of scientifically appropriate categories of related chemicals and structure activity relationships. The animal protection community therefore suggested that ACC estimate the toxicity of 2,5-fu by means of detailed structural analysis based on toxicity data from similar compounds. Despite the fact that ACC reported results of mammalian acute toxicity tests with this substance, in which animals were dosed with the equivalent of pumping more than 1.5 lbs of lubricating oil into a human's stomach, EPA requested additional acute toxicity information. EPA agreed with all the proposed mammalian testing, including the *in vivo* genetic toxicity test, with no justification either on the Agency's or ACC's part as to why *in vitro* tests would not suffice, as required by the animal welfare guidelines.

In June 2003, DuPont submitted a test plan for "fluorobenzene" with no additional animal tests proposed. EPA commented that DuPont needed to provide a justification for using data from an analogous chemical (chlorobenzene), and that additional information was needed to support its "closed system intermediate" claim. EPA recommended that a reproductive/developmental toxicity test be conducted if the closed system intermediate claim was not supported, despite the fact that there were substantial existing data that could have been used in a weight-of-evidence approach. DuPont provided information on four repeated-dose studies with fluorobenzene; the 28-day study analyzed 35 tissues by histopathology. A list of the reproductive tissues analyzed, along with the two negative developmental studies with chlorobenzene, could have been used in a weight-of-evidence approach to satisfy SIDS

endpoints without additional animal testing. EPA made no mention of a two-generation reproduction study with chlorobenzene that could be used as read-across data for fluorobenzene. EPA recommended fish toxicity testing despite the existence of three fish studies on fluorobenzene and chlorobenzene. Even though the fish studies were considered “suboptimal,” they could have been used in tandem with ECOSAR modeling (previously recommended by EPA) to satisfy the SIDS endpoint for acute fish toxicity without additional testing.

In November 2003, Bayer submitted an HPV test plan for “O,O-diethyl dithiophosphate” with a developmental toxicity study (OECD 414) proposed. Although EPA recommended the use of a reproductive/developmental toxicity test (OECD 421), the Agency made no mention of the fact that this chemical is an organophosphate pesticide, and appears to be caustic. The organophosphate class of chemicals inhibits cholinesterase activity and has been extensively studied by EPA and is thus regulated as posing potential carcinogenic, reproductive, developmental, and neurological hazards. Furthermore, exposure to O,O-diethyl dithiophosphate via the oral route in previous testing produced mild to moderate esophageal burns, with more severe burns occurring in the stomach. Any interpretation of systemic effects that might be observed by testing via the oral route would be confounded by caustic effects of this compound in the gastrointestinal tract. This fact further precluded testing of O,O-diethyl dithiophosphate in an OECD protocol where the common route of exposure is gavage. The entire knowledge of this chemical, including the extensive data available on other organophosphates, should have been considered and no additional animal tests recommended. In addition, EPA recommended that Bayer perform acute toxicity testing for fish because the existing fish studies were conducted on the sodium salt of the sponsored chemical. However, Bayer states that only the salt form of the chemical is soluble in water. ECOSAR values for acute fish toxicity should have been sufficient for this chemical.

In November 2003, the BPD/BPA Coalition submitted a test plan for “benzene phosphorous dichloride” and “benzene phosphinic acid,” which proposed conducting a fish toxicity test. Even though this substance is corrosive by nature, and despite the existence of data from a previous repeated-dose study, as well as reproductive and developmental toxicity data for a structurally similar substance, EPA requested that a repeated-dose/reproductive/developmental toxicity test be conducted. In so doing, the Agency contradicted its previous guidance when it stated in another test plan that, “based on the strong acidic and corrosive nature of the substance, EPA believes that the sponsor needs to consider whether the proposed testing would yield meaningful results” (benzene sulfonic acid). The Agency similarly asserted, in relation to another previous test plan, that “EPA believes that, given the strong acidity of this substance, it is unlikely that the submitter's proposed mammalian tests would provide meaningful systemic toxicity information” (hydroxybenzenesulfonic acid). According to the Sponsor, the test EPA requested would be conducted via oral gavage, which would cause undue distress to the animals used, and would not add any meaningful information to the database beyond corrosive effects.

In January 2004, EPA posted API's test plan for the “reclaimed substances category,” which included proposals for *in vivo* genetic toxicity test, a reproductive/developmental toxicity test, and acute fish toxicity testing. The plan included little to no chemical characterization of these complex substances, did not make use of all the existing data on the substances, and ignored existing data on several of the streams in this category. It represented yet another

incomprehensible proposal by API to conduct new and avoidable animal testing rather than analyze existing data. There was no evidence that API made any effort to obtain the study records from the existing studies, which included a 90-day subchronic study that examined developmental endpoints, a one-generation reproduction study on rabbits, *in vitro* genetic toxicity tests, a recent developmental toxicity study, and a recent two-year carcinogenicity bioassay. Instead, the test plan proposed a virtually full slate of animal testing. Although EPA wanted the test plan broken down into four separate categories, the Agency generally agreed with the test plan. It did not object to the failure to use existing data, and did not object to the lack of chemical characterization or raise the issue that some of the substances might be caustic.

In December 2003, ACC submitted a test plan for “phosphoric acid, mono [2-ethylhexyl] ester compound w/tert-dodecanamine,” which proposed testing for every endpoint in the SIDS battery, although it did not specify the testing protocols. EPA agreed with all the proposed testing, even though the most basic physical and chemical properties of this chemical were not provided. These data would have indicated potential for the material to be corrosive and additional testing of caustic materials in animals is generally precluded by the difficulty in differentiating toxicity from direct corrosive effects. EPA should have asked the Sponsor to first establish physicochemical properties before moving to animal tests and to provide the specific test protocols it planned to use.

The Stepan Company test plan for “sodium lauryl sulfoacetate (acetic acid, sulfo-, 1-dodecyl ester sodium salt)” was posted for public review in February 2004. The test plan proposed a reproductive/developmental toxicity test. Animal protection groups requested that EPA ask the Sponsor to consider other chemicals that could provide toxicity data, such as sodium dodecyl sulfate or other similar detergents and sodium salts, and/or take into account the historical use of the chemical in cosmetic and other personal care products. Instead, the Agency simply agreed with the proposed testing and requested that an acute fish toxicity test be conducted as well.

In February 2004, EPA posted the Diethyl Ether Producers Association (DEEPA) test plan for “diethyl ether,” which proposed repeated-dose, reproductive, and developmental toxicity testing. The animal protection community pointed out that this was a well-studied chemical with at least seven existing repeated-dose studies (including a 90-day sub-chronic study), one reproductive, and four developmental toxicity studies carried out in rats, mice, guinea pigs, and rabbits, in addition to 15 acute toxicity and irritation studies in rats, mice, guinea pigs, rabbits, and dogs. Further, DEEPA did not appear to have made any attempt to use data from related compounds to predict the toxicity of diethyl ether, even though structure-activity relationship (SAR) analysis is particularly strong in the case of aliphatic esters, since the SARs of these compounds have been thoroughly investigated, and the correlation between their toxic activities and molecular connectivity indices is known to be excellent. Data from dimethyl ether could have been used to support the submission for diethyl ether, as the only difference between these two compounds is one additional methyl group in each alkyl chain length, which has perhaps the most readily predictable effect on toxicity of any molecular structure. Notably, an HPV test plan for dimethyl ether was submitted by DuPont in November 2000, and no animal tests were proposed. The animal protection community concluded its comments by stressing that “this test plan is a prime example of sloppy, thoughtless toxicology that ignores existing data and thus

violates both the 1999 animal welfare agreement and the 2000 *Federal Register* notice that state that ‘Participants shall maximize the use of existing and scientifically adequate data to minimize further testing.’” Representatives of the animal protection community repeatedly contacted EPA to request that our concerns be considered and that the Agency follow the animal welfare guidance in its response. Nevertheless, EPA simply approved in one sentence all the proposed testing, posting its comments almost seven months after the close of the comment period.

In December 2003, Dow submitted a test plan for “4-Heptanol,2,6-dimethyl- (DIBC),” which proposed a repeated-dose, reproductive, and developmental toxicity test that was already underway, in glaring violation of the requirement to post test plans for public comment before undertaking any new testing. The animal protection community’s comments noted that Dow had made no obvious attempt to conduct a thoughtful analysis of the toxicity of DIBC or to follow the animal welfare guidance, and that it was unclear whether Dow had considered the use of toxicity information from other chemicals that may share similar physicochemical or toxicological properties with DIBC. Further, DIBC is an FDA GRAS chemical. EPA posted its comments more than nine-months after the close of the public comment period and, in one sentence, agreed with the proposed testing.

In February 2004, EPA posted Proviron Fine Chemicals’ test plan for “N-n-butylbenzenesulfonamide (BBSA),” which proposed repeated-dose, reproductive, and developmental toxicity testing and genetic toxicity testing. The animal protection community again brought this test plan specifically to the Agency’s attention, because the Sponsor had ignored numerous animal studies which had already been conducted on BBSA and which showed that the substance had been the subject of intense research due to concerns of possible neurotoxicity. It appeared as though the Sponsor had not even attempted to access any of the standard databases for information about BBSA. The animal protection community’s comments also pointed out that at least one developmental toxicity study had been conducted as well as a repeated-dose study conducted by Proviron itself, which included an assessment of male reproductive organs (even though Proviron had stated that no reproductive information was available). Two additional facts were noted in the animal protection community’s comments: (1) that Proviron had apparently conducted a 28-day oral toxicity study (OECD Test Guideline 407) while the test plan was in preparation, in clear violation of the requirement that companies submit their test plans for a 120-day public comment period before initiating testing, and (2) that if the neurotoxicity and developmental toxicity of BBSA, which had already been seen in animals, were also to be found in humans, this would render its general and reproductive toxicity purely academic. It was clear that Proviron had made no attempt to abide by the animal welfare guidance that states: “In analyzing the adequacy of existing data, participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach. Participants may conclude that there is sufficient data, given the totality of what is known about a chemical, including human experience, that certain endpoints need not be tested,” and “as with all chemicals, before generating new information, participants should further consider whether any additional information obtained would be useful or relevant.” Yet EPA posted its response almost seven-months after the close of the public comment period and, in one sentence, approved all the proposed testing.

In December 2003, Reilly Industries submitted a test plan for 2-vinylpyridine that proposed conducting a reproductive/developmental mammalian toxicity test as well as an acute fish toxicity test. The animal protection community objected strenuously to this plan as, according to the Sponsor, the substance is “corrosive to tissues, flammable, and acutely toxic by oral and dermal routes.” Its comments included the fact that “chemicals that are classified as irritating will not likely cause systemic toxicity at doses which do not also cause significant local gastrointestinal (GI) effects. All three cited repeated-dose studies shared this principle. Thus, the interpretation of any systemic effects that may be observed in proposed reproductive or developmental studies will be confounded by local effects due to the irritancy of the compound. Since it has been reported in the developmental toxicology literature that maternal stress may be related to developmental effects, it would be difficult to imply causation in the event of a positive result, since 2-vinylpyridine is so acutely toxic and corrosive. Additionally, the irritancy potential is such that testing would result in extreme suffering for the animals involved. Other public commenters have pointed out at other times that chemicals with such properties should not be subject to further testing in animals, and the EPA has accepted this principle in its consideration of other HPV test plans on similarly corrosive chemicals.” In addition, the Sponsor provided information on two fish toxicity modeling programs which should have been sufficient to fulfill the fish toxicity endpoint. Again, the animal protection community contacted both the Sponsor and EPA to bring attention to this blatant violation of the animal welfare guidance: “Moreover, any further information about other kinds of toxicity will not change the regulatory framework or protective regulations that already exist and govern the production and use of 2-vinylpyridine. Since the chemical is a human skin sensitizer, flammable, and corrosive, there are significant regulations in place regarding clean-up and personal protective procedures. Therefore, further animal testing will not result in additional protective measures being adopted....” The proposal thus clearly violated the principle that “As with all chemicals, before generating new information, participants should further consider whether any additional information obtained would be useful or relevant.” EPA posted its response more than eight months after the close of the public comment and, in one sentence, approved the proposed testing. EPA made no mention of the corrosivity issue.

In March 2004, EPA posted a GE test plan for “1H-Isoindole-1,3(2H)-dione, 5,5'-[(methylethylidene)bis(4,1-phenyleneoxy)]bis[2-methyl- (Bisphenol A Bisimide),” which proposed mammalian reproductive and fish toxicity testing. The reproductive toxicity test (1) was already in progress, in clear violation of the 120-day public review and comment period, (2) could have been avoided through use of existing data (histopathology of the reproductive organs from a repeat dose study combined with information from two existing developmental toxicity tests), and (3) was conducted with no apparent attempt to group this chemical with other similar, extensively studied chemicals. Further, although the BPA-BI test plan was posted online on March 2, 2004, the robust summary was not posted or not accessible until June 24, 2004, six days before the deadline for public comments, thus limiting the ability to perform a thorough review of this test plan. In addition to the reproductive toxicity study, GE also proposed an acute fish toxicity test, even though the robust summary had no section on ecotoxicity, no information on the log K_{ow} , the substance’s stability in water, or other parameters that would render a fish test inappropriate. Despite this flagrant lack of information, clear disregard for existing data, and the fact that the animal protection community specifically wrote that “EPA needs to once again clarify the requirements of the HPV program to General Electric and ensure that it abides by

them if it is going to participate in the HPV program,” the Agency posted its approval of all the proposed testing more than eight months after the close of the public comment period and with no comment on the deficiencies of the test plan.

In December 2003, Air Products and Chemicals submitted a test plan for “2,4,6-tris[(Dimethylamino)methyl]phenol” and proposed conducting a repeated-dose/reproductive/developmental toxicity test, despite stating that “Due to the corrosive nature of the material, dose levels employed were relatively low and clinical and pathological findings were limited to the site of exposure. It is therefore unclear whether phenol, 2,4,6-tris[(dimethylamino)methyl]- would be systemically toxic via oral exposure where a higher dose may be feasible.” EPA comments, posted a full year later, consisted simply of a one-page letter agreeing with all proposed testing and making no mention of the corrosive and irritating nature of this chemical. As EPA should have known, chemicals that are classified as irritating will not likely cause systemic toxicity at doses that do not also cause significant local GI effects. Thus, the interpretation of any systemic effects that may be observed in proposed reproductive or developmental studies will be confounded by local effects due to the irritancy of the compound. Since it has been reported in the developmental toxicology literature that maternal stress may be related to developmental effects, it would be difficult to infer causation in the event of a positive result, since 2,4,6-tris[(dimethylamino)methyl]phenol is so acutely toxic and corrosive. Furthermore, testing lower doses that might avoid the corrosive properties on the GI mucosa is also unlikely to produce any demonstrable toxicity (i.e., reproductive, developmental, or systemic effects following repeated exposure). Nevertheless no special consideration for these types of materials was apparently provided.

In April 2004, Chevron Phillips submitted a test plan for “benzenemethanethiol” and proposed conducting a repeated-dose toxicity test, an *in vitro* genetic toxicity test, and an acute fish toxicity test. The Sponsor proposed using existing data on a more acutely toxic analog that also causes reproductive and developmental effects in animals in order to avoid conducting a new reproductive/developmental toxicity test on this substance. Despite this conservative and more protective approach, EPA rejected the use of the analog and stated that a repeated-dose/reproductive/developmental toxicity test should be conducted (which uses 675 animals rather than the proposed test that would have used 40 animals). In its comments, posted almost eight months after the close of the public comment period, EPA ignored the animal welfare ramifications as well as thoughtful toxicology.

Lastly, as noted in several instances above, EPA’s extreme tardiness in responding to test plans is, in itself, a violation of the spirit of the animal welfare agreement since some companies are proceeding with their testing plans when no response from the agency is forthcoming. For example, INDSPEC Chemical Corp.’s test plan for Resorcinol was submitted to the agency in June 2004. Public comments were due in early November 2004. The animal protection community was very concerned that the proposed testing, a multi-generational reproductive toxicity test—which is not even part of the HPV Program and which consumes upwards of 2,500 animals—was already underway. EPA could have considered the animal protection comments and told the company that the six pre-existing developmental toxicity studies, together with histopathology from reproductive organs likely examined as part of several existing repeated-dose studies (including two 90-day sub-chronic studies in two species) as well as

reproductive data summarized in a March 2003 Toxicology Excellence in Risk Assessment (TERA) report, would have been sufficient to fulfill the reproductive toxicity endpoint. Nevertheless, five months after the close of the public comment period, EPA has yet to post its response to this test plan.

In December 2003, API submitted a test plan for “lubricating grease thickeners,” which proposed conducting a reproductive and developmental toxicity test on animals with this clearly non-toxic and well-documented substance. More than nine months after the close of the public comment period, EPA has yet to post its response to this test plan.

These examples demonstrate conclusively that when it comes to EPA’s animal welfare guidelines, neither HPV Program Sponsors, nor the Agency itself, has adhered to, observed, or “*proceed[ed] in a manner that is consistent with these principles and concerns.*” Accordingly, it is necessary for the Agency to initiate rulemaking in order to ensure that animal welfare guidance is an enforceable component of the HPV Program and any other testing under TSCA whether by Rule or Consent Order.

IV. REPRESENTATIONS MADE TO CONGRESS

On June 17, 1999, the U.S. House of Representatives’ Subcommittee on Energy and Environment of the Committee on Science held a hearing on the HPV Program. William H. Sanders, the Director of the Office of Pollution Prevention and Toxics gave oral testimony on behalf of the Agency along with a prepared statement. Following the hearing, the Agency submitted written responses to post-hearing questions submitted by members of the subcommittee. Highlighted below are extracts from the Congressional Record (the “Record” – Exh. 5.) Some of the representations made by the EPA strike at the very core of this petition.

Sanders' Oral Testimony on behalf of EPA:

There really has been some misunderstanding regarding EPA's stance on animal welfare, and let me just sum up very quickly and say, unequivocally, that EPA is, and always has been, committed to examining the alternative test methods that reduce the number of animals for testing, that reduce the pain and suffering of test animals, and to replace animals in testing with *in vitro* animals. (Record p. 15.)

Written Statement by Sanders on behalf of EPA:

I want to stress that EPA's attention to animal welfare issues predates the creation of the 1998 HPV Challenge Program. EPA has been committed to reducing animal testing and refining test methods for the past decade. We have demonstrated this commitment through actions both domestically and internationally. A primary example is EPA's support of the use of the combined protocol (OECD 422). This particular test guideline, which provides information on repeat dose, developmental, and reproductive toxicity, was initially developed by the U.S. in the late 1980's and early 1990's for use in the OECD SIDS program. Use of this guideline results in a significant reduction in the number of

animals used as compared to the three separate protocols otherwise used for the same purpose. (Record p. 26.)

Since animal welfare concerns in the specific context of the HPV Challenge Program were brought to my attention late last year, we have made very substantial progress in addressing those concerns. We are recommending under the HPV Challenge the use of specific protocols that significantly reduce animal usage and allow the use of non-animal testing methods in some cases. EPA recommends use of the "Up-and-Down Procedure" (OECD 425), a method which can evaluate acute toxicity using about 8 animals per test, as an alternative to the LD50 test, which requires 20 animals.... In the area of genetic toxicity, EPA has decided to drop its preference for the *in vivo* micronucleus test and to accept either *in vivo* or *in vitro* (non-animal) studies, as is allowed under the OECD SIDS program. (Record p. 27.)

Sanders' Oral Answers to Questions by Congressmen:

[T]he way the program has been developed, it really has been developed to minimize any additional testing. It really has been developed to start out with information that is available, to use categories to reduce the number of tests available, to use structure activity relationships to reduce the number of tests available. And finally, when you do have to do animal testing, and we recognize that we will have to do animal testing for some years to come, where there are no valid alternatives, we have sought to minimize the use of animals going into the tests. (Record p. 73.)

EPA's Written Responses to Questions Posed by Hon. F. James Sensenbrenner, Jr. in his Letter Dated March 3, 1999:

EPA recommends that testing not begin until after test plans are posted to the web for a 90-day review period which will provide an opportunity to identify valid existing data which may not have been cited by the sponsor(s) or to recommend alterations of the test plan which may reduce the need for animal testing. (Record p. 96; see also Record p. 221 for substantially the same statement.)

EPA's Written Responses to Post-Hearing Questions by Republican Members:

The EPA is committed to incorporate alternatives to animal testing in the HPV Challenge program and will use its participation in the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and the European Centre for the Validation of Alternative Methods (ECVAM) programs and ongoing efforts in the OECD to ensure the scientific acceptability of alternative test methods. (Record p. 220.)

EPA's Letter by Susan H. Wayland, Acting Assistant Administrator, to Senator Bob Smith dated March 15, 2000:

Let me assure you that we intend to follow the October 14 principles on testing in the implementation of the voluntary HPV Challenge Program. We also intend to incorporate these principles into any future regulatory action such as test rules that

may be pursued as part of the Chemical Right to Know Initiative, to the full extent allowed under the Toxic Substances Control Act. (Exh. 6.)

This last letter, standing alone, illustrates the necessity and reason for this petition. The EPA must be accountable and stand behind its representations to Congress, to stakeholders, and to the public. If it intended to follow the October 14 principles, and if it intended to apply them to any future regulatory action, then those intentions have lain dormant. It is time for the Agency to transform intentions into performance.

V. ADDITIONAL STATUTORY CONSIDERATIONS

An additional point we ask the Administrator to consider in conjunction with promulgating a rule relating to the animal welfare principles is the public policy mandate expressed in the National Institutes of Health Revitalization Act of 1993, 42 *U.S.C.* §283e. The Act directs the National Institutes of Health to conduct or support research into methods of research that “do not require the use of animals,” that “reduce the number of animals used in such research,” that encourage the “acceptance by the scientific community” of alternative methods, and that trains “scientists in the use of such methods.” 42 *U.S.C.* §283e. It is clear from the language of the statute that Congress intended the EPA to be an active contributor to the development and implementation of the above-mentioned plan, as involvement by “representatives of the Environmental Protection Agency...” on the interagency committee is a specific requirement under the Act. These provisions clearly demonstrate Congressional intent with respect to the reduction, refinement, and ultimate replacement of animal use in testing, which positively supports the merits of this petition.

Additionally, the rulemaking we seek is in complete harmony with the public policy considerations expressed in the ICCVAM Authorization Act, 42 *U.S.C.* §2851 *et seq.* One of the central objectives of the ICCVAM Authorization Act is to promote and advance the reduction and replacement of animal testing, and the search for alternatives. In establishing ICCVAM as a permanent Committee, Congress signaled its firm commitment to replacing live animal testing with *in vitro* methods. ICCVAM’s mandate is clear: reliance on animal-based methods must be reduced, refined and replaced.

Each of the referenced Acts expresses Congressional intent with respect to the reduction, refinement, and ultimate replacement of animal use in testing. Each Act positively supports the merits and spirit of this petition

The general disregard for the HPV Program's animal welfare policy exhibited by both the EPA and industry stands in stark contrast to the principles espoused in the ICCVAM Authorization Act and the NIH Revitalization Act. The EPA, which has publicly committed itself to pursuing alternatives to animal testing, and which is a standing member of ICCVAM, must grant this petition. To do otherwise is to make a mockery of ICCVAM's goals, and reduces all of the representations EPA made to Congress and the public to meaningless rhetoric.

CONCLUSION

The cases outlined above, the exhibits attached hereto, and the Affidavits in support, all demonstrate, beyond any doubt, that EPA's avowed commitment to animal welfare principles and to minimizing animal testing are little more than hollow platitudes, and that so long as its animal welfare guidance remains voluntary, the Agency is as likely to "voluntarily" disregard it as are HPV Sponsors. Indeed the Agency's disregard is an endorsement for the Sponsors' disregard.

For the foregoing reasons, we respectfully urge the Administrator to initiate rulemaking to promulgate a rule requiring all TSCA testing – be it in the HPV Program, by test rule, or by consent order – adhere to basic animal welfare guidelines and to require the Agency to enforce those guidelines where they are ignored.

We look forward to a response from the Agency within the 90-day time frame required by TSCA.

Respectfully submitted,

/s/

Jessica Sandler, MHS
Federal Agency Liaison

/s/

Susan L. Hall, Esq.
Legal Counsel

Appendix

Additional test plans in which EPA responses violated one or more of the animal welfare principles:

Alkyl sulfides sponsored by ACC
Petroleum gas sponsored by API
3-chloro-2-methylpropene (methallyl chloride) sponsored by FMC Corp.
2,3-Dihydro-2,2-dimethyl-7-benzofuranol sponsored by FMC Corp.
Alkylphenols category sponsored by Schenectady
Cyclohexyl isocyanate sponsored by Bayer Corp.
p-Methylstyrene sponsored by Deltech Corp.
Sulfosuccinates category sponsored by SOCMA
Acetic acid and salts sponsored by ACC
4,4-Oxydianiline sponsored by DuPont
Butylated triphenyl phosphate sponsored by Akzo Nobel
Isodecyl/phenyl phosphate category sponsored by General Electric
Higher olefins category sponsored by ACC
Alkaryl sulfonates sponsored by ACC
Propylene streams category sponsored by ACC
m-Nitrotoluene sponsored by ACC
Diethylbenzene-rich streams sponsored by ACC
Methyl mercaptan analogs sponsored by the Mercaptans/thiol Council
Isodecyl benzoate sponsored by Velsicol Compound Corp.
Sulfenamide accelerators sponsored by ACC
n-Butyl glycidyl ether sponsored by the Plastics Industry Trade Association
Phosphoric acid derivatives sponsored by ACC
Carbonic acid, oxydiethylene diallyl ester sponsored by Great Lakes Chemical Co.
Resin oils and cyclodiene concentrates sponsored by ACC
Gasoline blending streams sponsored by API
Dicamba and acifluorfen intermediates category sponsored by BASF
Cyclopropanecarbonic acid and methylallyloxyphen sponsored by FMC Corp.
Rosin esters category sponsored by Pine Chemicals Association
2-butanone, 3-methyl, (methyl isopropyl ketone) sponsored by Eastman Chemical Co.
t-Butyl alcohol sponsored by t-Butyl Alcohol HPV Committee
Mixed xylenol category sponsored by Merisol USA
Silane, dichlorodimethyl, with silica sponsored by Cabot Corp.
Dithiophosphate alkyl esters sponsored by ACC
Mononitrile category sponsored by Dupont
m-Diisopropenylbenzene sponsored by Cytec
Alkyl diphenyl oxide sulfonates sponsored by Dow
Methyl 4,6,6,6-tetrachloro-3,3-dimethylhexanoate sponsored by FMC Corp.
Zinc dibutylthiocarbamate sponsored by ACC
2-Chloropyridine sponsored by Arch Chemicals
Lubricating oil basestocks sponsored by API
2,3,4,5,6-pentachloropyridine sponsored by Dow

Hydroquinone bis(2-hydroxyethyl) ether sponsored by Arch Chemicals
 1,3,4-thiadiazole,2,5-bis(tert-nonyldithio) sponsored by ACC
 Cyclohexyl derivatives sponsored by Cyclohexyl Derivatives Consortium
 4,4-Oxydi(benzenesulfonohydrazide) sponsored by Crompton Corp.
 2,2-bis[[3-(dodecyl-thio)-1-oxopropoxy]propane-1,3-diyl bis[3-(dodecyl-thio) propionate
 sponsored by Crompton Corp.
 4-(1-Methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline sponsored by
 Crompton Corp.
 O,O-diethyl dithiophosphate sponsored by Bayer Corp.
 Phenol, heptyl derivatives sponsored by ACC
 Aromatic Extracts Category sponsored by API
 Thiodipropionitrile sponsored by Thioesters Association
 Alkenes, C15-C18 alpha, reaction products with sulfurized dodecyl phenol, calcium salt,
 sulfurized sponsored by ACC
 Benzene, Ethenyl-, Aryl-Bromo Derivatives sponsored by Great Lakes Chemical Co.
 Sodium Lauryl Sulfoacetate sponsored by Stefan Co.
 Polyphosphoric acid esters of triethanolamine, sodium salts sponsored by Arch
 Chemicals
 N-phenyl-1-naphthalenamine sponsored by Bayer
 Triphenylboron category sponsored by DuPont
 Fatty Nitrogen-Derived Ether Nitriles Category sponsored by ACC
 2-Oxetanone, 4-methylene sponsored by Color Pigments Manufacturers Assoc.

AFFIDAVIT OF JESSICA SANDLER

1. I, Jessica Sandler, am the Federal Agency Liaison for the Petitioner People for the Ethical Treatment of Animals (“PETA”).
2. I have a Master’s degree in Environmental Health Sciences from The Johns Hopkins University and over 20 years of experience as an occupational safety and health specialist, eight of those with the Occupational Safety and Health Administration in Washington, D.C.
3. PETA, headquartered in Norfolk, Virginia, is a nonprofit animal protection organization with more than 800,000 members and supporters.
4. The framework of the voluntary High Production Volume Challenge Program (“HPV Program”), announced on October 9, 1998, provided that chemical companies should test HPV chemicals using a subset of the Organization for Economic Cooperation and Development Screening Information Data Set (“SIDS”) battery of tests. The SIDS test incorporated into the HPV challenge included as many as 11 animal tests per chemical tested.
5. In November 1998, immediately upon learning about what was at the time the most massive animal testing program in the Environmental Protection Agency’s (“EPA” or the “Agency”) history—as initially devised, over 1.3 million animals were slated to be poisoned and killed—PETA launched a national grassroots campaign to stop the HPV Program.
6. In fact, since first learning of the HPV Program in November 1998, PETA has spent considerable time and resources on efforts to ensure that animal welfare issues are given consideration. PETA hired staff specifically to work on issues surrounding the HPV Program; put together a coalition of 17 national animal protection organizations, representing a combined membership of more than 10 million Americans, to ensure that animal welfare considerations were included in the HPV Program; sought then-Vice President Gore’s

support in implementing animal welfare concerns into the HPV Program, testified before the House Subcommittee on Energy and the Environment at Congressional oversight hearings on the HPV Program; collected and transmitted information to Congress, thus garnering the support of a number of bipartisan members of Congress to incorporate animal welfare concerns into the HPV Program; testified as a stakeholder in the HPV Program at EPA meetings held after the implementation of the program; sent numerous letters to EPA about restructuring the HPV Program to reduce or eliminate the use of animals; negotiated an agreement with EPA to reduce the use of animals in the HPV Program; submitted comments to EPA on the vast majority of the more than 360 test plans proposed by chemical companies to date; and contacted a number of chemical companies that proposed the use of animals in their test plans in an effort to reduce or eliminate the proposed animal testing.

7. PETA first entered into negotiations regarding the HPV Program with the White House through its representative with the Council on Environmental Quality, Bradley Campbell, in February 1999. Following a series of meetings with Mr. Campbell, the EPA, Environmental Defense, the Chemical Manufacturers Association, and the American Petroleum Institute, the EPA issued a policy on October 14, 1999, detailing the manner in which the number of animals used in the HPV Program was to be reduced. Mr. Campbell repeatedly used the term “thoughtful toxicology,” which was to be the cornerstone of the animal welfare guidance. EPA issued this policy in the form of a letter to all HPV chemical company participants, posted it on its website, and eventually published its details in the Federal Register. 65 Fed. Reg. 81,686 (December 26, 2000). In return, PETA called off its grassroots campaign against the HPV Program though continuing to work on ameliorating the Program’s deleterious effects on animals.

8. The principles by which the use of animals in the HPV Program were to be reduced fell into the following categories:

- Avoiding Checklists – *“In analyzing the adequacy of existing data, participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach. Participants may conclude that there is sufficient data... that certain endpoints need not be tested.”*
- Using Existing Data – *“Participants shall maximize the use of existing ... data to minimize further testing....”*
- Using Categories – *“Participants shall maximize the use of scientifically appropriate categories of related chemicals and structure-activity relationships.”*
- Testing Only When Relevant – *“[B]efore generating new information, participants should further consider whether any additional information obtained would be useful or relevant.”*
- *In Vitro* Genotoxicity Testing “Encouraged” – *“Participants are encouraged to use in vitro genetic toxicity testing...unless known chemical properties preclude its use.”*

9. In addition, the EPA increased the public comment period on each test plan from 90 to 120 days and committed to considering the animal welfare guidance in its reviews and responses to test plans. Companies had previously committed to delaying the initiation of testing until the public comment period had expired and public comments had been reviewed.

10. It became clear very quickly that EPA staff were not following the animal welfare guidelines which the Agency had put forth. As noted in my June 2004 article, “An Evaluation of the US High Production Volume Chemical-Testing Programme” [ATLA], “the EPA has exhibited a clear double standard with regard to animal testing in its responses to proposed HPV test plans. In general, the EPA presumes that more animal testing is required. It does not require any justification if a company plans to use animal tests — even when the company has clearly ignored existing data — whilst disproportionately scrutinizing all proposals to use categories, structure-activity relationship analyses, or existing data in order

to avoid further testing on animals.” (Exh. A.) Further, EPA had continually portrayed the HPV Program as a screening level program, using “dumbed-down toxicology,” whose purpose was to help prioritize chemicals for further testing. Yet in a number of cases it would request new data that was well beyond the scope of a screening level program and more appropriate to a post-SIDS program that would include other factors such as an exposure component.

11. I contacted the EPA continually regarding its failure to abide by its commitment to observe and ensure that Sponsors followed the animal welfare guidelines. In October 2000, the EPA issued the following assurances at the level of the Acting Administrator: it would issue a letter to trade associations reminding them of the principles of the October 1999 letter and urging companies to abide by it (Exh. B.); and the agency would develop a mechanism for the EPA to take our comments into consideration before responding with their own. (Exh. C.) In a phone conversation between me and Priscilla Flattery (Special Assistant to Sanders, then-director of the Office of Pollution Prevention and Toxics) on October 13, 2000, the EPA reiterated its commitment to ‘do initial and subsequent reviews with the October principles in mind, to do everything we can to encourage companies to follow those principles, and to review test plans for GRAS chemicals and point those out.’ Ms. Flattery expressed surprise that we had found two of the General Electric chemicals to be food contact substances and stated that EPA should have recognized that fact. Finally, she committed to requesting that Sponsors respond to deviations from the animal welfare guidance within 30 days.
12. Nevertheless, the EPA and many of the test plan Sponsors continued to use “checklist” toxicity testing, ignored existing data, and disregarded potential categories, all in direct violation of the animal welfare guidelines. Examples of both the EPA’s and the Sponsors’

ignoring the animal welfare principles are detailed in the Petition for Rulemaking to which this Affidavit is appended.⁶ My colleagues and I continually wrote, called, and e-mailed the Agency when it blatantly violated the precepts of the animal welfare guidance; with rare exception our concerns were ignored.

13. In some cases, the Agency posted its comments *prior to* the deadline for public comment, thus ensuring that the latter were not taken into consideration. Additionally, EPA has posted some of its comments extremely late but, even in these cases, the Agency still has not taken the animal protection comments into consideration. Most recently, EPA has issued its responses six to nine months after the close of the public comment period but, even in the case of test plans about which the animal protection community has expressed extreme concern, EPA has issued one sentence approvals of the proposed testing. It appears that, in an effort to “catch-up,” EPA staff and consultants are currently barely reviewing the proposals.
14. In November 2001, Great Lakes Chemical Corporation submitted a test plan for phosphoric acid tris (methylphenyl) ester (tricresyl phosphate) which called for a developmental toxicity test. The test plan was extremely sloppy and lacked the necessary information on basic physico-chemical properties. The animal protection community noted that EPA should fulfill its role in proactively addressing the submission of such inadequate plans to the HPV program. On July 19, 2002, a full three months after the close of the public comment period and the submission of the animal protection community comments, EPA approved the testing. In violation of the guidance to minimize the number of animals used, EPA “strongly” recommended that an OECD Test Guideline No. 414 (1300 animals) be

⁶ I recognize that in some instances, EPA did abide by some of the animal welfare principles. In some cases, EPA asked that *in vitro* genetic toxicity testing be conducted or that the combined test protocol be used or, as mentioned in the petition, requested hydrolysis data, though it did not do so consistently.

conducted on this reproductive toxicant rather than (1) requesting the combined test protocol which uses half the number of animals and/or (2) recognizing that existing data show that this substance apparently interferes with reproduction which could suffice for a screening level program. I attempted repeatedly to obtain an explanation from the Agency for its demand that an OECD 414 be conducted. EPA has never responded with a reason.

Correspondence on this issue via e-mail included, but is not limited to, the following (Exh. D.):

- E-mail dated August 7, 2002 from me to Priscilla Flattery, special assistant to the director of OPPT, and Sherry Sterling, EPA designee on animal welfare-related matters, asking for an explanation as to “why the EPA has recommended the use of the OECD 414 (rather than the combined protocol 421) which uses almost twice as many animals, for example in its response to the Great Lakes Chemical Corp. for its test plan on phosphoric acid tris (methylphenyl) ester (tricresyl phosphate).”
- Email dated August 7, 2002, from Ms. Flattery to me stating “Jessica, will get back to you on this as well.”
- E-mail dated October 3, 2002, from me to Ms. Flattery stating “I never heard back from you on [this] question.”
- E-mail dated January 22, 2003, from me to Ms. Flattery and Ms. Sterling stating “I would still very much like to get an answer to [this] outstanding question from almost six months ago.”
- E-mail dated February 4, 2003, from me to Ms. Flattery and Ms. Sterling stating “We’re still waiting for any kind of response to the question[s] below.”

- E-mail dated February 5, 2003, from Ms. Flattery to me stating “I’ll have something to you today.” No response to this question was ever received.

15. Correspondence via U.S. mail and facsimile included, but is not limited to, the following (Exh. E):

- Letter dated April 23, 2002, from me to Stephen Johnson, then Acting Administrator of the Office of Prevention, Pesticides, and Toxic Substances in which I raised the Great Lakes issue.
- I raised the Great Lakes issue again in a March 20, 2003, letter to Mr. Johnson on a number of outstanding HPV-related issues and stated that “[I] still have not received a response as to why the EPA made this recommendation to the company.” To this day, although some EPA correspondence has obliquely referred to the Great Lakes issue, no response on this question has ever been received.

16. In addition to repeatedly bringing the failure of both Sponsors and the Agency to follow the animal welfare guidance to the attention of EPA officials, I also brought it to the attention of the Council on Environmental Quality. (Exh. F.) The aforementioned correspondence represents a small fraction of the correspondence I have had over the past five years with the Agency regarding animal welfare violations of the HPV Program.

17. Further examples of the EPA’s and the Sponsors’ failure to observe the HPV Program animal welfare principles are detailed in the Petition and listed in the Appendix.

18. In sum, and in fact, the animal welfare guidelines have proven to be nothing more than Agency lip service – words on paper designed to mollify, indeed trick, the animal protection community into thinking that its concerns would be an integral part of the HPV Program.

19. Pursuant to 28 U.S.C. § 1746, I hereby declare under penalty of perjury that the foregoing is true and correct.

Date

Jessica Sandler, MHS
Federal Agency Liaison, PETA

DECLARATION OF CHAD B. SANDUSKY, PH.D.

1. I received my BS degree in zoology (with a minor in chemistry) from Duke University in 1967 and a Ph.D. in Pharmacology from Emory University in 1975, followed by 2.5 years as a post-doctoral fellow in the Department of Pharmacology at Georgetown University.
2. Following my postdoctoral fellowship, I worked at the U.S. Environmental Protection Agency (EPA) as a toxicologist in the Office of Pesticide Programs, followed by many years as a consultant to industry in toxicology and risk assessments of chemicals. I am a past manager of toxicology and risk assessment at three consulting firms, Technical Assessment systems (TAS), TAS-Environ and Environ. As such, I have extensive experience at both EPA and as a consultant in pesticide toxicology as well as in exposure and risk assessment.
3. I have coordinated the preparation and submission of dossiers for the reauthorization process under EU 91/414 and represented the Institute of Food Technology (IFT) at the Codex Committee for Pesticide Residues (CCPR) in The Hague. More recently I have served as a representative of an international coalition of animal protections organizations (ICAPO) to the Organization for Economic Cooperation and Development (OECD) to the Existing Chemicals Program in Paris. I currently serve as a core panel member on the Voluntary Children's Chemical Exposure Program (VCCEP) and as a member of the Board of Trustees of Toxicology Excellence in Risk Assessment (TERA).
4. I am currently the Director of Toxicology and Research at the Physicians Committee for Responsible Medicine (PCRM), an organization that promotes, among its several health related programs, the development and use of alternatives to animals in testing and research.
5. Since August 2002, I and two of PCRM's research analysts have reviewed and prepared extensive comments on dozens of test plans submitted under the EPA's High Production Volume (HPV) Program. I have also peer reviewed an equal number of reviews of test plans prepared by PETA on behalf of the animal protection community. Altogether these reviews cover more than 200 test plans.
6. I have frequently observed examples in which both industry and EPA failed to follow various elements of the animal welfare principles enumerated in EPA's October 4, 1999 letter to participants and the December 2000 Federal Register notice. In many other instances, the principles were applied only to a minimal degree and new animal tests conducted when they could have been avoided.
7. I hereby declare that the foregoing is true and correct.

April 4, 2005

Chad B. Sandusky, PhD.
Director of Toxicology and Research
Physicians Committee for Responsible Medicine

DECLARATION OF SARA AMUNDSON

1. I, Sara Amundson, am Deputy and Legislative Director for the Doris Day Animal League (“DDAL”).

2. I have a Bachelor of Arts degree in Political Science, Communications and Psychology from Concordia College and 16 years of federal legislative and regulatory experience in Washington, D.C.

3. DDAL, headquartered in Washington, D.C., is a nonprofit animal advocacy organization with more than 350,000 members and supporters. DDAL has, since its inception in 1987, held a long-term interest in and advocated for the use of non-animal and other alternative test methods to meet federal regulatory requirements, recommendations and voluntary mandates.

4. In November 1998, upon learning about the High Production Volume Challenge Program (“HPV Program”) announced by the Environmental Protection Agency (“EPA”), Environmental Defense Fund and the Chemical Manufacturers Association, DDAL appealed to members of Congress requesting that the EPA consider mechanisms for reducing the number of animals proposed for testing. Several key members of Congress either generated or signed on to letters of concern to the EPA.

5. In 1999, DDAL expanded its congressional activity and grassroots program through lobbying for oversight hearings in the House Subcommittee on Energy and the Environment, numerous meetings with personnel and committee staff in both the House and the Senate, testifying as a stakeholder in the HPV Program at EPA meetings held during launching and implementation of the program, signed on to numerous letters to EPA about restructuring the HPV Program to reduce or eliminate the use of animals and co-negotiated an agreement with EPA to reduce the use of animals in the HPV Program.

6. In February 1999, DDAL and PETA entered into negotiations regarding the HPV Program with the White House through its representative, Bradley Campbell. A series of negotiations and meetings with Mr. Campbell, the EPA, Environmental Defense, the Chemical Manufacturers Association, and the American Petroleum Institute, culminated in the animal welfare principles outlined in a letter from EPA dated October 14, 1999. In that letter EPA detailed the guidelines on animal welfare and the manner in which the number of animals used in the HPV Program was to be reduced. EPA sent the animal welfare guidance letter to all HPV chemical company participants, posted it on its website, and eventually published its details in the Federal Register. The animal welfare principles were the direct result of DDAL's and PETA's intense negotiations with the Agency and other stakeholders involved in the HPV Program

7. A primary component of the October 14, 1999 agreement with the EPA included a pledge by the agency of \$500,000 million to research, develop and validate non-animal

tests for potential inclusion in the HPV Program. DDAL insisted that this appropriation be a final and primary component of the agreement.

8. DDAL subsequently helped obtain another \$4 million from Congress, specifically earmarked for the EPA to develop and implement non-animal test methods that could replace the use of animals in testing programs such as the HPV program. To this date, EPA has not fully detailed to members of the animal advocacy community these expenditures. Repeated attempts through letters from interested members of Congress and meetings with animal advocacy representatives have not produced a satisfactory response from the EPA.

9. I hereby declare under penalty of perjury that the foregoing is true and correct.

April 4, 2005

Sara Amundson
Deputy and Legislative Director, DDAL